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## NOTICE OF ALLOWANCE AND FEE(S) DUE

7590 11/17/2009

SUGHRUE MION, PLLC  
2100 Pennsylvania Avenue, NW  
Washington, DC 20037-3213

EXAMINER

YAMNITZKY, MARIE ROSE

ART UNIT

PAPER NUMBER

1794

DATE MAILED: 11/17/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/995,814

11/29/2001

Shuji Doi

Q67430

9735

TITLE OF INVENTION: POLYMERIC FLUORESCENT SUBSTANCE AND POLYMER LIGHT-EMITTING DEVICE USING THE SAME

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	02/17/2010

**THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.**

**THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.**

### HOW TO REPLY TO THIS NOTICE:

#### I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.**

# **PART B - FEE(S) TRANSMITTAL**

**Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
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**INSTRUCTIONS:** This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

7590 11/17/2009

**SUGHRUE MION, PLLC**  
2100 Pennsylvania Avenue, NW  
Washington, DC 20037-3213

## **Certificate of Mailing or Transmission**

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/995,814 11/29/2001 Shuji Doi Q67430 9735

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nonprovisional NO \$1510 \$300 \$0 \$1810 02/17/2010

EXAMINER	ART UNIT	CLASS-SUBCLASS
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YAMNITZKY, MARIE ROSE 1794 313-504000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 \_\_\_\_\_
- (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 \_\_\_\_\_
- 3 \_\_\_\_\_

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies \_\_\_\_\_

4b. Payment of Fee(s); (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number \_\_\_\_\_ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

**NOTE:** The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature \_\_\_\_\_

Date \_\_\_\_\_

Typed or printed name \_\_\_\_\_

Registration No. \_\_\_\_\_

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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YAMNITZKY, MARIE ROSE

ART UNIT

PAPER NUMBER

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## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

**Notice of Allowability**

Application No.

09/995,814

Examiner

Marie R. Yamnitzky

Applicant(s)

DOI ET AL.

Art Unit

1794

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment and Certified Translation filed October 06, 2009.
2. ☒ The allowed claim(s) is/are 1, 6, 8-17 and 28 (renumbered as 1-13, respectively).
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of the:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |                                                                                                            |                                                                                        |
|------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)                                           | 5. <input type="checkbox"/> Notice of Informal Patent Application                      |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                    |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance              |
|                                                                                                            | 9. <input type="checkbox"/> Other _____.                                               |

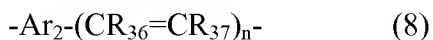
An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

This examiner's amendment makes corrections to the specification to correct errors with respect to spelling and/or grammar and/or of a typographical nature.

The specification has been amended as follows:

The paragraph bridging pages 3-4 (previously amended by preliminary amendment filed February 25, 2002) has been rewritten as shown below:

In formulae (2) to (7),  $X_1$ ,  $X_3$ ,  $X_5$ ,  $X_7$  and  $X_9$  each independently represent a group selected from  $-\text{CR}_{21}=\text{CR}_{22}-$ ,  $-\text{CR}_{23}=\text{N}-$ ,  $-\text{N}=\text{CR}_{24}-$ ,  $-\text{O}-\text{CO}-$ ,  $-\text{CR}_{25}\text{R}_{26}-$ ,  ~~$-\text{C}\Theta-$~~ ,  $-\text{CO}-$ ,  $-\text{O}-$ ,  $-\text{S}-$ ,  $-\text{Se}-$ ,  $-\text{NR}_{27}-$  and  $-\text{SiR}_{28}\text{R}_{29}-$ ;  $X_2$ ,  $X_4$ ,  $X_6$ ,  $X_8$  and  $X_{10}$  to  $X_{13}$  each independently represent a group selected from  $-\text{CR}_{30}=$  and  $-\text{N}=$ ;  $\text{R}_3$  to  $\text{R}_{30}$  each independently represent a hydrogen atom or a substituent selected from alkyl group, alkoxy group, alkylthio group, alkylsilyl group, alkylamino group, aryl group, aryloxy group, arylsilyl group, arylamino group, arylalkyl group, arylalkoxy group, arylalkylsilyl group, arylalkylamino group, arylalkenyl group, ~~arylalkinyl~~ arylalkynyl group, monovalent heterocyclic compound group and cyano group; at least one of  $\text{R}_3$  to  $\text{R}_{30}$  is not a hydrogen atom.



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In the formula, Ar<sub>2</sub> represents an arylene group or a divalent heterocyclic compound group, but the group is not represented by any of formulae (2) to (7); Ar<sub>2</sub> may have one or more substituents; when Ar<sub>2</sub> has a plurality of substituents, they may be the same or different; R<sub>36</sub> and R<sub>37</sub> each independently represent a group selected from a hydrogen atom, alkyl groups, aryl groups, monovalent heterocyclic compound groups and a cyano group; ~~and m~~ and n represents 0 or 1.

Also, the present invention relates to a polymer light emitting device comprising at least a light emitting layer between a pair of electrodes composed of an anode and a cathode, at least one of which is transparent or semi-transparent, wherein the light emitting layer comprises the above polymeric fluorescent substance.

Page 11, line 6: both occurrences of "naphtyl" have been changed to --naphthyl--.

Page 11, line 11: "naphtyloxy" has been changed to --naphthyloxy--.

Page 11, line 12: "naphtyloxy" has been changed to --naphthyloxy--.

Page 11, line 17: both occurrences of "naphtylsilyl" have been changed to --naphthylsilyl--.

Page 11, line 24: "naphtylamino" has been changed to --naphthylamino--.

Page 11, line 25: "naphtylamino" has been changed to --naphthylamino--.

Page 12, line 5: both occurrences of "naphtyl" have been changed to --naphthyl--.

Page 12, line 11: both occurrences of "naphtyl" have been changed to --naphthyl--.

Page 12, line 17: “naphtyl” has been changed to --naphthyl--.

Page 12, line 18: “naphtyl” has been changed to --naphthyl--.

Page 13, line 2: both occurrences of “naphtyl” have been changed to --naphthyl--.

Page 13, line 9: both occurrences of “naphtyl” have been changed to --naphthyl--.

Page 13, line 16: both occurrences of “naphtyl” have been changed to --naphthyl--.

Page 13, line 23: “pyroryl” has been changed to --pyrroyl--.

Page 16, line 1: both occurrences of “naphtyl” have been changed to --naphthyl--.

Page 16, line 6: “pyroryl” has been changed to --pyrroyl--.

Page 41, line 7: “an” has been changed to --a--.

Page 44, line 3: A period has been inserted after “cathode”.

Page 47, line 8: “main chain,” has been changed to --main chain are used,--.

Page 48, line 11: --a binder-- has been inserted after “preferably”.

Page 48, line 12: --a binder-- has been inserted after “and”.

Page 51, line 2: “that” has been changed to --a binder--.

Page 51, line 3: --a binder-- has been inserted after “and”.

Page 51, line 23: --one-- has been inserted after “be”.

Page 52, line 23: a comma has been inserted after “derivative”.

Page 54, line 2: “an” (second occurrence) has been changed to --a--.

Page 54, line 19: “an” has been changed to --a--.

Page 54, line 24: “an” has been changed to --a--.

Page 55, line 3: --on-- has been inserted after “laminated”.

Page 57, line 20: “resultanting” has been changed to --resulting--.

Page 58, line 3: “layers” has been changed to --layer--.

Page 58, line 19: “boronate).” has been changed to --boronate) was obtained.--

Page 83, 3<sup>rd</sup> line after the formula: “phen” has been changed to --phenyl}--.

Page 83, 4<sup>th</sup> line after the formula: “yl}” has been deleted.

Page 87, 3<sup>rd</sup> line after the formula: “naphtha” has been changed to --naphthalene--.

Page 87, 4<sup>th</sup> line after the formula: “lene” has been deleted.

Page 89, line 1: “naphth” has been changed to --naphthalene--.

Page 89, line 2: “alene” has been deleted.

Page 90, 3<sup>rd</sup> line after the formula: “naphth” has been changed to --naphthalene--.

Page 90, 4<sup>th</sup> line after the formula: “alene” has been deleted.

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The amendment filed October 06, 2009, which amends claim 1 and cancels claim 7, has been entered.

The certified translation of applicant’s foreign priority application JP 2000-371180 (certified translation filed October 06, 2009) has been considered.

In light of the amendment and the certified translation, the rejections based on Uckert et al. (US 7,214,763) are withdrawn.

Claims 1, 6, 8-17 and 28 are allowed.



Art Unit: 1794

Any inquiry concerning this communication should be directed to Marie R. Yamnitzky at telephone number (571) 272-1531. The examiner works a flexible schedule but can generally be reached at this number from 7:00 a.m. to 3:30 p.m. Monday and Wednesday-Friday.

The current fax number for all official faxes is (571) 273-8300. (Unofficial faxes to be sent directly to examiner Yamnitzky can be sent to (571) 273-1531.)

/Marie R. Yamnitzky/  
Primary Examiner, Art Unit 1794

MRY  
November 16, 2009